

High Test Peroxide High Sealing Conical Seal, Phase I

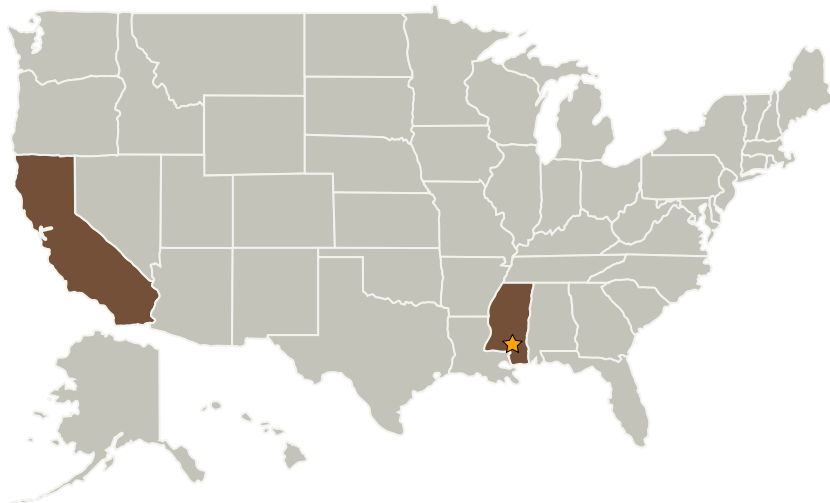
Completed Technology Project (2004 - 2004)



Project Introduction

High Test Peroxide (HTP) Highly Compatible High Sealing Conical Seals are necessary for ground test operations and space based applications. Current conical seals are all made from relatively incompatible materials and the most compatible materials have limitations: stainless steel seals are hard to seat, especially at large sizes and are still only acceptable for short term exposure at best, whereas aluminum seals corrode quickly when exposed to HTP and other metals such as stainless steel. The other common materials for conical seals, copper and nickel, are unsuited for HTP applications. A highly compatible conical seal is non-existent, and the best seal available is stainless steel which is at best Class 2 and difficult to seal. High compatible conical seals will permit long term storage HTP systems to be created and will improve operations which are currently using short term HTP systems.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★ Stennis Space Center(SSC)	Lead Organization	NASA Center	Stennis Space Center, Mississippi
General Kinetics LLC	Supporting Organization	Industry	Lake Forest, California



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Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Organizational Responsibility	1
Project Management	2
Technology Areas	2

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Stennis Space Center (SSC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Primary U.S. Work Locations

California

Mississippi

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

Mark C Ventura

Technology Areas

Primary:

- TX13 Ground, Test, and Surface Systems
 - └ TX13.1 Infrastructure Optimization
 - └ TX13.1.7 Impact/Damage/Radiation Resistant Systems